## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Butler

Serial No.: 10/749,259

Confirmation No.: 8566

Filed: December 31, 2003

For: Using Excess Levels of Metal Salts

to Improve Properties when

Incorporating Polymers in Asphalt

Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Honorable Commissioner:

Atty. Dkt. No.: COS-890

Group Art Unit: 1713

Cust. No.: 25264

Examiner: Mulcahy

Appeal No.: 2008-2800

CERTIFICATE OF EFS-WEB TRANSMISSION 37 CFR 1.10

I hereby certify that this correspondence is being deposited on the date below with the United States Patent Office via the EFS-Web pervices.

9/10/2008

REQUEST FOR REHEARING

In response to the Board Decision dated August 29, 2008, having a shortened statutory period for response set to expire on October 29, 2008, Applicants respectfully request rehearing of the Board Decision of claims 23-24, 26, 35-37 and 39 based on previously submitted arguments, further defined below.

No fee is believed necessary with this submission. However, the Commissioner is authorized to charge any additional fees that may be required for this submission, or credit any overpayments, to Deposit Account No. 03-3345.

## **REMARKS**

Claims 23-24, 26, 35-37 and 39 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,713,539 (*Guo*). The Board Decision states that "*Guo* discloses an asphalt composition comprising base asphalt...polymer having double bonds...compatibilizer...cross-linking reagent...and organic polar compound". *See*, Board Decision at page 2, last paragraph to page 3, first paragraph. The Board Decision further reasons that Appellants arguments regarding claims 23 et seq. are not persuasive "because *Guo* teaches using calcium oxide". *See*, *Id.* at page 9, second paragraph.

However, Appellants respectfully submit that the Board overlooked the fact that claims 23-24, 26, 35-37 and 39 require that the asphalt mixture includes ground tire rubber. *Guo* does not teach, show or suggest utilizing ground tire rubber in an asphalt composition, as required by the identified claims. (The identified claims are attached hereto in the Appendix.) The lack of teaching in *Guo* was previously submitted discussed in the Appeal Brief filed December 22, 2006, third paragraph. Due to the failure of *Guo* to teach incorporating crumb rubber into the recited asphalt mixture, Appellants respectfully request reversal of the rejection of claims 23-24, 26, 35-37 and 39.

Respectfully submitted

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## **APPENDIX**

23. A method for preparing asphalt and polymer compositions comprising:
heating a mixture consisting essentially of asphalt and an elastomeric polymer;
adding from about 0.05 wt.% up to 5 wt% of a metal oxide, where the metal of the
metal oxide is selected from Groups IIA and IIB of the Periodic Table (CAS notation);

adding ground tire rubber (GTR) to the mixture of asphalt and elastomeric polymer before or after the metal oxide is added; and

where the GTR and mixture of asphalt and elastomeric polymer is more homogeneous as compared to an identical mixture of GTR, asphalt and elastomeric polymer having a lesser amount of metal oxide.

- 24. The method of claim 23 where the GTR ranges from about 1 to about 20 wt% of the mixture.
- 26. A polymer modified asphalt (PMA) consisting essentially of: an asphalt;

an elastomeric polymer; and

an organic or inorganic metal salt present in an amount from about 0.05 wt% up to 5 wt% based on the weight of the asphalt/polymer mixture, where the metal of the metal oxide is selected from the group consisting essentially of zinc, cadmium, mercury, copper, silver, nickel, platinum, iron, magnesium, and mixtures thereof.

- 35. The PMA of claim 26 further consisting of ground tire rubber (GTR).
- 36. The PMA of claim 35 where the GTR ranges from about 1 to about 20 wt% of the PMA.
- 37. The PMA of claim 35 where the metal salt is zinc oxide.

39. The PMA of claim 35 where the mixture of GTR and PMA is more homogeneous as compared to an identical mixture of GTR and PMA having a lesser amount of metal salt.